



## Rig 101 for Customers

### Our Rigs:

**-Dimensions :** 6'8" long by 4' wide by 3'10" tall on a 4' by 4' bottom frame that fits in most standard sized trucks and trailers

**-Chem Line :** P40 Comet pump attached to motor (8 GPM and 150 PSI)

**-Rinse Line :** 12 Volt pump (7 GPM and 60 PSI)

**-Hose Reels :** 3 Titan Hose reels

**-Hose :** 250 feet of 1/2' Flexzilla hose (3)

**-Tanks :** Two 55 gallon water tanks, Two 55 gallon chemical tanks, One 7 gallon surfactant tank

**-Motor :** GX 160 or GX 200

**-Proportioning :** Hydro-mixer XL Proportioning/Metering/Blending Unit

**-4 metering valves :** Water, Chem, Soap 1 (Surfactant), Soap 2 (2nd Chem tank)

**-DI Filter :** Tucker DI Filter

**-Hose to Drone Connection :** Banjo Clips

### Answers to common questions about our rig

What pump system do you use? - We use a P40 pump attached to a GX 160, although it runs the same off of a GX 200. We also have a rinse/water only line that runs off a 7 GPM, 60 psi 12 Volt pump, that can be switched between DI water and regular water.

What type of motor do you run your system with? - We have rigs that run off the GX 160, and rigs that run off the GX200. Both can run our system using over 150 feet of 1/2' Flexzilla hose lines.

How many hoses run off your system? - We have 3 hoses attached to our system. The first is our water intake hose, which is located next to the motor. This line can be attached to any local water source, which allows you to fill your water tanks during jobs. There is also a float shutoff in the water tank, so it will never over fill. The other two hoses are used for spraying. One is the chemical hose line, which uses P40 pump

system and the Hydro-Mixer XL proportioning unit in tandem to decide the percentage of chemical run through the line. The other is the water hose line, and it should only ever have water running through it (unless you put chemical in a water tank). The water line is run off the 12 Volt pump, while the chemical line is run off the P40 pump. **EXTRA:** The chem line can run only water if the proportioning unit is set up only to run water (ie. Not opening the chem line valve)

How many gallons of water can your rig hold? **-110 gallons of water**

How many gallons of chemical can your rig hold? **- 110 gallons or 55 gallons each of two separate chemicals**

**Hydro-Mixer XL Proportioning Unit (Only runs off of the P40 pump and motor)**

The Proportioning Unit makes the mixing of chemicals and water simple. The easy to use dials allow you to set up your chemical and surfactant percentages.

**NOTICE:** Soap 1 pulls from your 7-gallon surfactant tank, while Soap 2 pulls from the second 55-gallon chemical tank.



Water Open; Chem closed  
\*100% water\*



Water Open; Chem Half-open  
\*75% water, 25% chem\*



Water Open; Chem Open  
\*50% water, 50% chem\*

Ex: Chemical tank has 12% SH in it, if the Hydro-Mixer was set how it is in the picture, you would be spraying:

**WATER**

**3% SH**

**6% SH**

## **Chemical Line Valve**

Whenever any chemical is to be run through the P40 pump system, you must ensure the chemical line valve is open. If it isn't open, you will only be pulling water.

**REMINDER:** Both the 'Chem' dial on the Hydro-Mixer XL and the chemical line valve must be open in order to spray any chemical.

**NOTICE:** Soap 2 pulls straight from the second 55-gallon chemical tank, but has no valve between it and the Hydro-Mixer XL.



Chemical Line Valve Closed  
\*Pulling from Water tank\*



Chemical Line Valve Open  
\*Pulling from Chemical tank\*

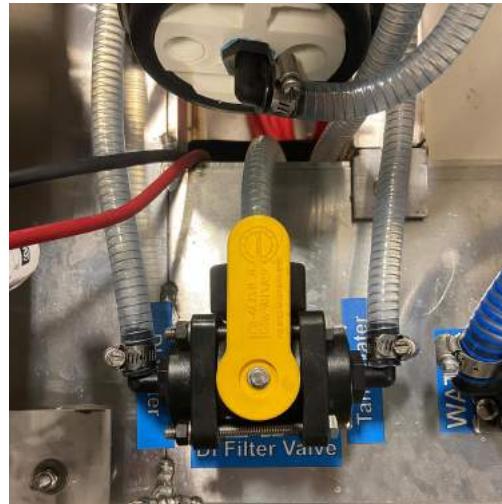
### DI Filter Valve (Only runs off 12V pump)

The DI filter valve must be open for the rig to run de-ionized water.

**REMINDER:** De-ionized water isn't ever run through the Hydro-mixer, therefore it **CAN'T** be run off the P40 pump and motor, it can only be run through the water hose.



Open DI Filter Valve  
\*Running De-Ionized water\*



Closed DI Filter Valve  
\*Running tank water\*

### Water Tank Drain/Handwash Valve (Doesn't run off any pump)

To drain the water tank, or simply get a quick little rinse of water for tools or your hands, the valve on the bottom of the rig must be opened.

**REMINDER:** This drain doesn't run on the P40 pump or the 12V pump. It runs solely off gravity and the water leftover in tanks, so do not open the valve if you don't plan on using it.



Drain Valve Closed  
\*No water running\*



Drain Valve Open  
\*Water running\*

## **Battery Charging**

The battery charger is located on top of the battery box and it is the only way to charge the car battery attached to the rig without physically removing the battery from it.



Idle

-Press mode to change charging type



Charging

-The first 12V cell should be lit up when charging



Fully Charged

- Fully lit green light when the battery is charged

Diagram of our rig

